

REMARKS

Reconsideration of the above-identified application in view of the following remarks is respectfully requested. By the present amendment, claims 2 and 8 have been amended and new claim 25 has been added. Claims 1-3, 5, 7, 8, 11, and 13-25 are pending in the application.

New claim 25 recites means for inflating the protection device to a pressure having a magnitude defined by a mathematical equation that expresses the pressure as an exponential function of the thickness of the protection device. None of the prior art of record disclose such an equation.

Claims 2 and 8 have been amended to recite that the equations recited therein approximate the functional relationship between the pressure to which the inflation fluid source inflates the protection device and the thickness of the protection device. None of the prior art of record disclose this structure.

Claim 1 and its dependent claims are addressed in the following paragraphs:

Claim 1 is Definite Under 35 U.S.C. §112, Second Paragraph

Claim 1 and claims 3, 14-20, 23, and 24, which depend from claim 1, stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite. Claim 1 recites an inflation fluid source comprising means for inflating an inflatable vehicle occupant protection device to a pressure that is a defined mathematical function of the thickness of the protection device. In the Office Action, the Examiner

acknowledges that claim 1 invokes the means-plus-function provisions of 35 U.S.C. §112, sixth paragraph. The Examiner, however, states that the "means for inflating..." language is indefinite because it is a method limitation included in an apparatus claim. Applicants disagree.

MPEP 2181 sets forth the guidelines for determining compliance with 35 U.S.C. §112, second paragraph for claims that fall under the provisions of 35 U.S.C. §112, sixth paragraph. According to the MPEP, if the structure, material, or acts corresponding to a means-plus-function limitation are described in the specification in specific terms and one skilled in the art could identify the structure, material, or acts from that description, then the requirements of 35 U.S.C. §112, second and sixth paragraphs are satisfied. See Atmel Corp. v. Information Storage Devices Inc., 198 F.3d 1374, 1379, 53 USPQ2d 1225, 1228 (Fed. Cir. 1999).

Claim 1 recites means for inflating an inflatable vehicle occupant protection device to a pressure that is a defined mathematical function of the thickness of the protection device. The specification goes into great detail in describing the structure that corresponds to the means-plus-function limitations of claim 1. The structure is an inflation fluid source for providing a volume of inflation fluid to a protection device, the volume of inflation fluid being sufficient to inflate the protection device to a pressure, the pressure being a defined mathematical function of the thickness of the protection device.

The specification details the thickness of the protection device beginning on page 10, line 19, with reference to Fig. 3. The specification also describes various types of inflators that may be implemented as the inflation fluid source beginning on page 5, line 4. The specification further describes, from page 11, line 11 through page 17, with reference to Figs. 3-5, how the volume of inflation fluid provided by the inflation fluid source inflates the protection device to a pressure that is a defined mathematical function of the thickness of the protection device. The specification certainly would make it very clear to one having ordinary skill in the art the structure corresponding to the means for inflating the inflatable vehicle occupant protection device to a pressure that is a defined mathematical function of the thickness of the protection device.

Also, in rejecting claim 1 under 35 U.S.C. §112, second paragraph, the Examiner states that the claim "is really directed to a method of designing an air bag/inflator system, and as such the claim is in a sense a hybrid claim directed to a method of designing an air bag, and not the apparatus itself." As set forth above, however, claim 1 clearly meets the requirements of 35 U.S.C. §112, paragraphs two and six, as set forth in MPEP 2181. The Examiner has provided no rationale as to why, nevertheless, claim 1 is indefinite. The Examiner's only reasoning is that the claim "appears" to include a method limitation. Applicants, on the other hand, have set forth with specificity the reasons why the subject limitations of claim 1 are definite under 35 U.S.C. §112,

second paragraph. Accordingly, Applicants respectfully submit that the rejection should be withdrawn.

Claim 1 Distinguishes Over the Prior Art

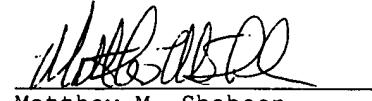
Claims 1, 3, 14-20, 23 and 24 also stand rejected under 35 U.S.C. §103(a) as being unpatentable over Cherry (U.S. Patent No. 6,022,044) in view of Bohman et al. (Paper No. 98-S8-0-07, 16th ESV Conference, June 1-4, 1998, Windsor, Canada).

Cherry and Bohman et al., alone or in combination, do not teach or suggest a means for inflating an inflatable vehicle occupant protection device to a pressure that is a defined mathematical function of the thickness of the protection device. Bohman et al. and Cherry are absolutely silent as to any defined function or equation. The construction recited in claim 1 provides a distinct advantage over the prior art. One advantage is that manufacturing and design time for the inflator of the present invention is shortened significantly over that of the prior art inflators. Therefore, the rejection of claim 1 under 35 U.S.C. 103(a) should be withdrawn. Claims 3, 14-20, 23 and 24 depend either directly or indirectly from claim 1. Therefore, the rejection of claims 3, 14-20, 23, and 24 under 35 U.S.C. 103(a) should also be withdrawn.

In view of the foregoing, it is respectfully submitted that the above identified application is in condition for allowance, and allowance of the above-identified application is respectfully requested.

Please charge any deficiency or credit any overpayment in
the fees for this amendment to our Deposit Account
No. 20-0090.

Respectfully submitted,



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